



COLONY OF MAURITIUS
ANNUAL REPORT

DUPLICATE

ON THE

MEDICAL & HEALTH DEPARTMENT
FOR 1920

I.—STATISTICS OF POPULATION

Population.

The total population of the Colony on December 31st 1920 is estimated at 365,107, showing an increase of 614 on the figures for the corresponding date of the preceding year. This rise is explained by an increase of 1,018 of births over deaths, less 404 more departures than arrivals.

Deaths.

During the year the total mortality was 11,773—12,682 less than in 1919 when the Influenza pandemic occurred.

The death rate was 32.3 o/oo compared with a revised death-rate of 35.5 o/oo the year before, and 39.3 o/oo for the preceding quinquennial period.

The following statement shows the district death rates and the average rates for the five years 1916–1920.

District	1916	1917	1918	1919	1920	Mean o/oo
Port Louis ...	38.7	44.4	50.4	126.9	47.3	61.3
Pamplemousses ...	33.9	41.7	40.8	70.5	32.5	43.9
Riv. du Rempart..	24.5	28.4	27.0	46.5	23.1	29.9
Flacq ...	33.5	30.3	31.2	62.6	29.9	37.1
Grand Port ...	32.3	30.6	33.5	59.1	39.0	38.9
Savanne...	28.8	30.6	28.4	49.5	34.7	34.4
Plaines Wilhems..	22.8	26.4	29.8	47.9	25.2	30.5
Moka ...	28.2	29.5	27.6	55.8	27.0	33.6
Black River	37.7	35.1	40.1	74.4	40.9	45.6
Whole Colony...	30.4	32.5	33.9	64.9	32.3	33.5

Port Louis and Rivière du Rempart show the highest and lowest death rates respectively. 3,537 deaths were registered as due to malaria, against 3,758 in 1919.

The proportion to total deaths was 30 o/o for the year under review.

Pulmonary Tuberculosis, Pneumonia, Bronchitis and Dysentery are returned for 974, 924, 621 and 499 deaths respectively with a percentage on total deaths of 8.2, 7.8, 5.2 and 4.2.

Annexure I gives the usual detailed information in respect of this part of the report.

Births.

Births have shown a fall : 12,791 against 13,261 the year previous.

The births rate was 35.1 o/oo against 35.2 o/oo for 1919 and an average of 35.3 o/oo for the preceding five years.

The district birth rates and the 5 year mean rates are shown as under.

District	1916	1917	1918	1919	1920	Mean o/oo
Port Louis ...	40.2	40.0	37.0	34.7	37.3	37.9
Pamplemousses ...	34.1	37.4	33.6	36.3	35.2	35.3
Riv. du Rempart..	38.4	40.5	37.0	37.8	37.3	38.2
Flacq ...	33.1	34.0	32.8	33.3	33.9	33.4
Grand Port ...	36.3	37.7	36.6	35.8	34.9	36.2
Savanne...	31.3	33.0	32.9	35.9	35.5	33.7
Plaines Wilhems...	36.1	38.1	33.3	34.6	33.8	35.1
Moka ...	30.8	34.7	35.6	37.6	35.6	34.8
Black River ..	28.8	31.8	35.2	28.1	32.6	31.3
Whole Colony...	35.0	36.9	34.8	35.2	35.1	35.4

Rivière du Rempart and Port Louis stand out with the highest birth rate, Moka, Savanne, Pamplemousses, Grand Port, Flacq, Plains Wilhems and Black River following in descending order.

II.—PREVALENCE OF SICKNESS AND THE RECURRENCE OF PARTICULAR DISEASES.

The following statement shows in a tabular form the number of cases treated in the public hospitals and at the dispensaries during the last 5 years :—

	1916	1917	1918	1919	1920	Average
Hospital admissions	19,013	21,411	22,845	26,820	22,132	22,424.2
Dispensary cases ...	53,697	58,323	57,025	78,546	65,302	62,578.6
Outdoor cases .	5,406	5,312	5,517	5,300	4,225	5,152.
Total ...	78,116	84,946	85,387	110,666	91,659	90,154.8

The figures for the year under report show a fall under the three headings returned as compared with those for the preceding year, but allowance must be made for the swelling of the figures in 1919 owing to the Influenza epidemic.

Comparison is however fair with the average figures.

MALARIA AND HYPERTROPHY OF THE SPLEEN.—The total number of admissions for malaria was 2,699 against 3,390 in 1919, a decrease of 691. The case mortality was 1.8 % against 2.6 % the previous year.

The death rate per thousand of the population was 9.7 compared with 9.9 for 1919 and 9.8 for the five year period 1915–1919. The corresponding rates for deaths returned under Malaria and Malarial Cachexia were 9.9, 10.3 and 10.1.

The following statement shows the admissions for Malaria and Hypertrophy of the Spleen during the year under review.

Institution	Malaria	Hypertrophy of Spleen	Total
Civil Hospital ...	533	110	643
Port Louis, Prison Hospital...	39	...	39
Long Mountain „	103	56	159
Poudre d'Or „	151	39	190
Flacq „	406	...	406
Mahebourg „	252	5	257
Souillac „	184	36	220
Barkly Asylum „	347	45	392
Lunatic Asylum „	95	...	95
Beau Bassin Prison „	156	12	168
Reformatory „	40	...	40
Moka „	79	11	90
Total ...	2,385	314	2,699

The return for the last ten years is as under :

Years ...	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Admissions	2,117	3,063	2,546	2,925	3,728	2,905	2,939	3,262	3,390	2,699

A total of 19,941 cases were treated at the public dispensaries, showing a decrease of 4,637 from the last year's figures.

Annexure II shows the spleen rates of children in schools for the two half years of 1920. The school spleen rates for the last five years are shown in the following statement :

District	Spleen-rates				
	1916	1917	1918	1919	1920
Port Louis ...	22.03	20.1	22.0	18.8	20.1
Pamplemousses ...	16.9	17.1	16.8	15.3	15.8
Rivière du Rempart ...	10.5	8.9	10.6	10.8	11.05
Flacq ...	24.8	20.5	19.1	17.08	19.1
Grand Port ...	18.6	16.7	14.2	10.8	16.4
Savanne ...	20.7	21.3	15.5	10.07	17.4
Black River ...	36.3	30.03	31.1	35.6	39.4
Plaines Wilhems ...	1.8	1.6	1.8	2.3	2.8
Moka ...	9.02	6.6	4.8	4.04	4.2
Whole Colony ...	14.7	13.5	13.02	10.9	13.4

DYSENTERY.—There has been, in respect of morbidity from this cause, still further improvement than reported the year before. The admissions, 604 have shown a decrease of 198 and the dispensary cases 1,039, a reduction of 151 as compared with the returns for 1919.

The figures have also kept well below the average for the quinquennial period 1915-19 viz : 768 and 1,391 for admissions and dispensary cases respectively.

The mortality for dysentery during the year was 499 against 1,026 deaths in 1919 and an average of 764 for the period 1915-19.

The above statistical figures permit of the inference that dysentery was much less prevalent during the year under report.

ENTERIC FEVER.—50 cases were admitted for treatment in the hospitals ; 13 less than the previous year. A death rate of 30% was yielded by 15 cases which had a fatal termination.

In the whole Island a total of 168 cases, with 43 deaths were notified against 190 with 39 deaths in 1919.

The district distribution of the cases was as under :

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
													1920	1919
Port Louis ...	2	...	2	1	6	3	1	1	3	3	1	1	24	19
Pamplemousses ...	...	1	2	1	2	...	1	...	...	...	...	...	7	10
Riv. du Rempart	1	2	2	...	...	...	...	...	1	...	...	...	6	14
Flacq ...	2	...	...	2	...	...	1	...	...	1	1	1	8	5
Grand Port ...	2	3	3	...	3	1	9	1	...	...	3	...	25	8
Savanne ...	1	...	...	2	3	...	1	...	...	1	1	4	13	42
Black River ...	...	...	1	...	...	...	1	...	...	...	...	...	2	6
Plaines Wilhems	3	5	9	3	4	7	8	1	5	3	5	2	55	63
Moka ...	3	4	4	4	3	2	1	...	2	2	1	2	28	23
Total ...	14	15	23	13	21	13	23	3	11	10	12	10	168	190

The prevalence of the disease has been more marked especially in Plaines Wilhems, Moka, Port Louis and Grand Port, the figures for the last district showing a much higher incidence than the year before.

DIPHTHERIA.—There were 4 admissions with 3 deaths. 24 cases, of which 5 proved fatal, were notified.

INFLUENZA.—The hospital returns show 2,106 admissions with 46 deaths.

In studying these figures the epidemic year 1919 must be left out. Comparison with a mean number of admissions of 1,177 for the period 1914-18 indicates that the prevalence of the disease was above normal during the year under review.

The hospital case death-rate 2.1 o/o stands favourably against 3.12 % for the epidemic year.

In the whole Colony 334 deaths were registered against an average of 209 for the period 1914-18, and this bears out the inference made from the hospital figures.

PNEUMONIA.—The admissions stand at 304 with 106 deaths against 197 with 65 deaths returned the year before. It must however be kept in mind that during the epidemic many cases of pneumonia were registered under influenza.

The period 1914-18 yielded an average of 336 hospital admissions and one of 725 deaths for the Colony. The number of deaths during the year under consideration was 924. Though a heavier death-rate must be expected outside hospitals, the high mortality figure points to higher prevalence than usual.

BRONCHITIS.—Comparison with average figures for the quinquennial period preceding the year of the Influenza epidemic shows 1,008 admissions and 621 deaths in the Colony against 781 and 626, average figures. Bronchitis thus appears to have been more prevalent with practically the same death rate.

BRONCHO-PNEUMONIA.—185 deaths were registered during the year, comparing with a mean of 207 for the 1914-18 period. In 1919, 441 deaths were ascribed to Broncho-pneumonia.

TUBERCULOSIS.—Hospital admissions have shown a rise during the year, 744 against 672 for the preceding twelve months. The case mortality rate was 24.7 against 28.7o/o for the two years respectively.

The mortality from Tuberculosis in the whole Colony was 974 against 1,047 in 1919 and 924 for 1914-18.

The following table shows the classification of deaths from Tubercular diseases for the last five years.

Deaths due to :	1916	1917	1918	1919	1920	Average for 5 years.
Pulmonary Tuberculosis ...	799	947	940	1,047	974	941
Phthisis and Tuberculosis ...	842	993	980	1,065	1,005	977
All forms of Tuberculosis ...	867	1,019	1,017	1,104	1,030	1,007

CEREBRO-SPINAL MENINGITIS.—No admissions. Only one case notified.

BERI-BERI.—The admissions have shown a further decrease: 133 against 345 in 1919, with 15 deaths against 28. The number of deaths returned for the whole Colony was 29 against 51 the year before.

NEPHRITIS.—532 admissions with 73 deaths, against 619 with 103 deaths in 1919.

SYPHILIS.—More cases were admitted than during the previous year, 472 against 344. Outdoor cases were also more numerous: 405 against 316.

Primary infection was diagnosed in 204 of the hospital and 127 of the outdoor cases.

LEPROSY.—The number of lepers at the St. Lazare Asylum on January 1st 1920 was 46 (29 males and 17 females).

There were 13 male and 2 female admissions during the year; 2 men and 4 women died, and 12 (10 men and 2 women) were discharged. There remained 43 lepers (30 men and 13 women) at the Asylum on 31st December 1920.

ERYSIPELAS.—49 cases were notified, with 11 deaths. Hospital admissions numbered 47 with 9 deaths.

MEASLES.—Only 2 cases were notified.

VARICELLA.—Two cases seen in Hospital.

PLAGUE.—The year has been free from human plague and the rats examined showed no infection.

The usual prophylactic work was continued with the same care as in previous years.

In Port Louis 1,755 disinfections were carried out and 302 dead animals were found during the work.

Sulphur fumigation was applied on 254 occasions, of which 81 with the Clayton apparatus; 151 rodents were thus destroyed.

The total number of rats destroyed in the Colony was 96,798, of which 43,755 in Port Louis.

MENTAL DISEASES.—The total number of persons certified insane on 31st December 1920 was 741, 17 more than the year before. The ratio of insane to total population was 1 in 492 or 20.32 per 10,000.

The admissions into the Lunatic Asylum numbered 131 (78 males, 53 females). They are classified into: first admissions 81; second admissions 5, third admission 1; 30, readmissions from probation; 1 readmission from Barkly Asylum Lunatic Branch Wards 1 readmission from Barkly Asylum C. D. Ward and 12 among those admitted on interim order, found not insane after examination by the Commissioners in Lunacy and discharged.

The causes of insanity are reported as grief, alcoholism, heredity, malarial fever, hysteria, and puerperal fever. Plaines Wilhems and Port Louis have furnished the larger number of admissions, the daily average number of patients in the Asylum was 442.20 and 91.9 in the Branch Wards against 470.61 and 94 the previous year.

The roll of criminal lunatics at the Asylum on January 1st 1920 was 18 (17 males, 1 female) 9 such patients, all males, were admitted during the year, 3 (males) were discharged and 2 (males) died.

The number of this class of lunatics remaining at the end of the year was 22 (21 males, 1 female).

A total of 90 inmates (55 males, 35 females) were discharged from the Asylum. They comprised 12 found not insane, 58 relieved and released on probation and 20 transferred to the Branch Wards at the Barkly Asylum. Among the patients at the Lunatic Branch Wards, 5 harmless imbeciles were allowed to leave the Asylum on probation under the care of relatives and friends.

Among the patients outside the Asylum on probation 15 (12 males, 3 females) found cured were given a final discharge.

There were 32 deaths in the Asylum, 24 less than in 1919. The death rate was 7.23% against 11.90% the year before and 8.09% for the preceding five years.

The number of inmates left on 31st December 1920 was 456 (222 males, 234 females) at the Lunatic Asylum and 89 (63 males, 26 females) in the Lunatic Branch Wards.

III.—VACCINATION

A total of 8,773 children were vaccinated at the public vaccine stations. The Vaccinators reported successful results in 8,460 instances. In 63 of the children, the result could not be ascertained.

The proportion of vaccinations to total births was 66.1%.

IV.—SANITARY ADMINISTRATION

Annexure III deals with this section of the report.

V.—HOSPITALS AND ASYLUMS

A summary of the work done at the establishments during the year is in the following statement.

Hospital	Remaining on 31.12.19	Fresh Admissions	Deaths	Remaining on 31.12.20	Outdoor cases	No. of beds	No. of operations	Deaths due to operations
Civil	176	7,044	317	137	452	287	1,205	25
Port Louis Prison ...	3	161	4	2	1,097	16	6	...
Long Mountain ...	20	1,162	71	14	83	35	73	...
Poudred'Or	20	1,755	44	8	...	69	159	3
Flacq	23	1,682	84	27	37	82	116	2
Mahebourg	40	2,185	101	24	286	116	219	2
Souillac	41	2,057	91	52	39	78	152	4
Barkly Asylum ...	104	3,240	268	79	3	241	202	2
Lunatic Asylum ...	42	673	32	36	543	33	28	...
Beau Bassin Prison ...	20	645	15	15	1,643	32	46	...
Reformatory	5	81	...	...	23	10	14	...
Moka	46	1,447	47	25	19	47	534	12
Total	540	22,132	1,074	419	4,225	1,046	2,754	50

VI.—MISCELLANEOUS

Port and Quarantine.—221 vessels called at our port during the year (154 steamers and 67 sailing ships).

Pratique was granted immediately on arrival in 186 cases.

Before admission to pratique, 35 vessels were disinfected and in 29 cases the cargo was also claytonised.

The quarantine station at Flat Island was used for the quarantine of the passengers from a cholera infected vessel on which two fatal cases occurred, one after arrival at the outer anchorage. Strict measures of quarantine were applied and a quarantine period of 21 days was observed. No further cases occurred either at the Station or on board, the vessel remaining under guard outside the harbour. Thorough disinfection was carried out before raising the quarantine.

Anti-malarial Works.—These works have continued under the control of the Sanitary Wardens and the Chief Sanitary Officer in whose report, Annexure III, fuller reference is made to the subject.

LABORATORY WORK.

Chemical and Medico-legal.—The Government Bacteriologist and Analyst received 230 articles of evidence or samples for examination and report.

They were as follows :—

Rape	8 cases	62 articles	Rice	2 cases	5 articles
Poisoning	8	32	Brandy	1	1
Murder	4	60	Rum	1	1
Suicide	1	2	Whisky	1	1
Homicide	1	1	Preserved fish ...	2	5
Sodomy	1	6	River Pollution ...	4	11
Gunja	1	1	Claret	2	3
Milk	28	38	Biscuits	1	1

The articles and samples were referred by the following Departments :—

Police	168	Judicial Authorities...	10
Revenue	1	Food Controller ...	3
Medical and Health ...	48		

In addition to the above, four samples of water were bacteriologically examined, being the quarterly testings of the Mare aux Vacoas supply.

Bacteriological and Chemical.—The samples under this head, exclusive of vaccines, totalled 1,048.

The following is a summary of the work done.—

Examination for Malaria, filariasis, diphtheria, tuberculosis, dysentery, intestinal parasites &c.,	...	...	...	...	...	...	456
Bacteriological examinations involving artificial cultivation	...	...	...	...	...	...	113
Widal's reaction for typhoid and paratyphoid	...	...	...	...	...	...	213
Blood culture on bile salt broth (13 positive)	...	...	...	...	...	...	48
Wasserman's reaction (positive 15, doubtful 6)	...	...	...	...	...	...	59
Vaccines (autogenous) typhoid	...	...	...	...	...	...	12
Staphylococcus 5, Streptococcus 1, Bac-Coli Communis 6, Bac-Coli communior 2, Bac-dysenteriae (Shiga) 2, Bac-dysenteriae (Flexner) 1,	...	...	...	...	...	...	17
Differential leucocyte counts	...	...	...	...	...	...	54
Examination of urine	...	...	...	...	...	...	179

In addition, 8 samples of neoplastic growths were examined showing: adenoma 1, osteoid sarcoma 1, squamous epithelioma 2, hypertrophied lymphatic gland 1, mucous polypus 1, small round-celled sarcoma 1, and myxoma 1.

Two cases of Leucæmia came under observation; one was of the myelogenic and the other of the lymphatic type.

A worm removed from a patient, who had resided some time in the Belgian Congo, was identified to be a female specimen of *Filaria Loa*. A tapeworm was also received for identification and proved to be a *Davainea*.

Anti-typhoid prophylactic vaccine continued to be prepared during the year, the stock being renewed every four months and the demand was fairly steady; 608 persons were vaccinated.

Research work was done on the same lines as during the previous year. Attention was also given to: (1) An hæmatological study on the transfusion of citrated blood to the human subject, (2) a review of the bacteriology of cholera, (3) an enquiry, clinical and bacteriological, into the existence in the Colony of encephalitis lethargica, (4) an investigation with regard to the best means of preserving milk sampled for chemical examination.

LEGISLATION AND DEPARTMENTAL CHANGES.—During the course of the year enactments were made to fix the observation period of cholera to 21 days, to provide appeal against orders under the Sanitation Consolidating Ordinance 1900 and power to impose disciplinary measures under the Sanitation and Lunacy laws. The Opium Ordinance was brought into force. The Medical inspection of outgoing vessels was discontinued.

Various Sanitary Regulations were published, the principal being in respect of the control of the public Abattoirs and Markets in the town of Beau Bassin-Rose Hill, the sale of cakes &c., and the manufacture of butter in the Island. Spanish Influenza was again added to the list of notifiable and quarantinable diseases.

Dr. Lunn, Medical Director, left the Colony on 11th February 1920.

On October 3rd, Dr. J. F. Kendrick, delegated by the International Health Board of the Rockefeller Foundation, arrived in Mauritius to make a survey of the incidence of Ankylostomiasis in the Colony. Every assistance was given to Dr. Kendrick in his work.

F. J. R. MOMPLÉ,

3rd August, 1921.

Acting Director, Medical and Health Department.

ANNEXURE I**Statement of deaths from principal diseases during 1920.***Obtained from Civil Status Returns*

Diseases	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric fever ...	4	8	5	5	6	1	4	2	3	1	3	1	43
Malarial fever ...	259	264	382	375	319	319	296	255	249	289	248	282	3,537
„ Cachexia ...	5	7	8	9	12	11	7	11	4	6	4	7	91
Dysentery ...	33	36	53	58	54	63	40	47	39	35	21	20	499
Influenza ...	17	9	26	12	16	31	44	36	33	38	33	39	334
Pneumonia ...	82	39	55	54	47	55	117	97	75	131	101	71	924
Bronchitis ...	36	38	47	36	48	55	61	55	58	64	48	65	621
Broncho pneumonia	19	12	14	12	9	19	18	4	8	17	30	23	185
Phthisis ...	2	..	1	1	3	5	1	5	2	3	3	5	31
Tuberculosis ...	65	66	93	75	89	86	82	88	95	89	70	76	974
Erysipelas ...	1	1	...	...	2	...	1	3	2	...	...	1	11
Diphtheria ...	...	1	2	...	...	...	...	...	2	...	...	...	5
Beri-Beri ...	2	1	5	5	2	2	3	2	2	1	2	2	29

ANNEXURE II (A)**Statement showing the Spleen rates of children in Schools***Half-year ended 30th June 1920.*

District	Total children on roll	Children examined	Spleens					Spleen rate	Average spleen
			1	3	6	9	Total with spleen		
Port Louis ...	5,539	3,846	2,911	397	297	241	935	24.5	2.09
Pamplemousses ...	1,661	1,044	853	126	41	24	191	18.29	1.62
Riv. du Rempart ...	1,347	859	768	56	18	17	91	10.59	1.39
Flacq ...	2,439	1,209	959	154	51	45	250	20.68	1.76
Grand Port ...	2,748	1,788	1,403	283	66	36	385	21.5	1.6
Savanne ...	1,498	965	807	125	19	14	158	16.3	1.5
Black River ...	555	292	168	38	38	48	124	42.4	3.1
Plaines Wilhems ...	6,166	4,459	4,312	115	21	11	147	3.3	1.1
Moka ...	1,712	1,160	1,110	39	6	5	50	4.31	1.13
Whole Colony ...	23,665	15,622	13,291	1,333	557	441	2,331	14.9	1.57

ANNEXURE II (B)**Statement showing the Spleen-rates of children in Schools***Half-year ended 31st December 1920.*

District	Children on roll	Children examined	Spleens					Spleen rate	Average spleen
			1	3	6	9	Total with spleen		
Port Louis ...	6,137	4,092	3,425	269	193	205	667	16.3	1.76
Pamplemousses ...	1,691	1,123	971	102	29	21	152	13.54	1.45
Riv. du Rempart ...	1,543	1,031	913	77	23	18	118	11.45	1.40
Flacq ...	2,407	1,658	1,360	165	63	70	298	17.97	1.73
Grand Port ...	2,954	1,764	1,466	215	61	22	298	16.8	1.51
Savanne ...	1,621	911	742	116	36	17	169	18.5	1.60
Black River ...	556	334	211	42	30	51	123	36.8	2.92
Plaines Wilhems ...	6,542	4,184	4,086	75	16	7	98	2.34	1.06
Moka ...	1,749	1,218	1,167	28	18	5	51	4.19	1.15
Whole Colony ...	25,200	16,315	14,341	1,089	469	416	1,974	12.09	1.48

NOTE :—The figures 3, 6, 9 are used to indicate *small*, *medium* and *great* enlargements of the spleen, as multiples of the normal spleen taken as unity and shown under figure 1.

Average spleen is obtained by adding together the children with no enlargement, 3 times the children with small enlargement, 6 times and 9 times those with medium and great enlargements and dividing by the total numbers examined.

ANNEXURE III.**Sanitary Condition of the Island**

I have the honour to submit the Annual Report on the sanitary condition of the Island for the year 1920. The full statements showing the duties performed and the contraventions detected by the staff of the Sanitary Officers are submitted separately.

The general description of the work done in connection with sanitation is as follows :

PORT LOUIS.—Throughout the year the Sanitary Officers paid 22,637 visits to private premises and lodging houses, while shops, markets, bakehouses, slaughter-houses and butcher's shops were inspected on 1,977 occasions. Special enquiries in regard to sanitary matters and other duties, such as the control of cremations and exhumations, were performed in 978 cases.

The testing of milk was carried out on 316 occasions and the number of cowsheds examined amounted to 400. The inspections were chiefly made in the Extra Urban Areas of the town where the milk sellers are to be found in large numbers.

The stables and pigsties were the subject of 821 inspections and the performance of the night soil service was specially checked 244 times during the course of the year.

Government Establishments, public and private gratuitous latrines, noxious factories, camps of labourers, docks, water courses, cemeteries and the seashores were inspected on 2,104 occasions.

Special attention was given to the waste lands in the Town and District of Port Louis. Besides clearing some were planted with eucalyptus and fenced in to prevent depredations from evil doers. The total number of waste lands as per municipal cadastre is 336 giving an aggregate area of roughly $4\frac{1}{2}$ millions square feet.

Disinfection was performed afloat and ashore, the staff was engaged on quarantine duty on board 21 vessels, and claytonisation of shops and disinfection of private premises was resorted to on 2,263 occasions. The enforcement of the Sanitary Laws and regulations of the Colony necessitated the attendance of Sanitary Officers (Inspectors and Guards) at the Law Courts on 238 occasions.

Dhobies workshops were visited 217 times and Lighters in the Harbour were inspected on 1,457 occasions during the year. Public sales of articles of food were controlled on 12 occasions and ten seizures were effected of foodstuffs unfit for human consumption, offered for sale in shops and other stores.

As regards nuisances on private premises 5,763 orders, notices and requests were issued by the Sanitary Staff for the removal of same, with the result that 3,622 had not been complied with at the end of the year.

Some 1,629 contraventions of the sanitary enactments were detected, and on the cases being brought before Court, fines to the amount of Rs. 1,712.50 were imposed by the Magistrate and duly collected.

The Municipality is responsible for the abatement of public nuisances existing in the Town of Port Louis, and 1,838 certificates pointing to such nuisances were transmitted to His Worship the Mayor, as provided for in Ordinance No. 23 of 1,903 ; of these 1,327 had not been attended to by the Municipal Corporation at the close of the year.

Special attention has been given to the condition of the bed and banks of the various streams of the Town. The policy advocated is to have a main central channel for carrying away the waters, with slanting banks planted with turf in cases where a stone pavement cannot be undertaken.

The scavenging service of the central part of the town was tolerably well performed during the year under review, but this was not the case with the outlying parts which were for the most neglected. Remissness in the performance of the service was reported on 509 occasions. In the extra urban area of Port Louis the work was performed by a gang of labourers and two donkey carts employed by this Department, extra hands being employed whenever required.

Besides the nuisances coming within the application of Ordinance No. 32 of 1894-95 already mentioned above, and detected in private premises, shops, stores, &c., 695 orders were served by the Sanitary Authority for improvements and removal of nuisances, as contemplated in Ordinance No. 21 of 1900 and Regulation No. 7 of 1920, with the view of combating plague and ensuring better sanitary conditions in the Town.

Apart from these, other nuisances bearing upon the public health were referred to the several Government departments concerned for action. They were as follows : 48 to the Honourable Director of Public Works, 5 to the General Manager of Railways, 3 to the War Department, and 40 to the Director of Forests. The application of the Swine Destruction Ordinance has resulted in the shooting of 62 pigs by the Police in the extra urban area of Port Louis.

Water Carriage System.—There has been no extension of the water carriage system in the Town during the year.

PLAGUE.

Incidence.—There has been no case of Plague in Port Louis since the 6th April 1915 and the country districts have remained free from the disease since February 27th 1917. Preventive measures consisting mainly in claytonisation of shops in the central part of the Town and destruction of rats throughout the city continue to be resorted to with very satisfactory results.

Disinfection.—1,755 premises were disinfected in Port Louis, most of these disinfections were carried out preventively in shops and other premises in which dead rats and other animals were found, 41 disinfections were carried out for infectious diseases other than plague.

Fumigation.—254 premises were fumigated by means of Sulphur Dioxide, 81 by the two Clayton apparatuses and 173 by the ordinary Sulphur burners. The number of rodents destroyed by this process amounted to 151.

Destruction of Rodents.—The number of traps placed in the various parts of the Town including its suburbs was 3,000 per diem. The number of rats caught during the year was 43,755 in Port Louis and 53,043 in the rural districts. The number of poisoned baits placed in the various parts of the Town was 30,000 on a monthly average.

Gravid Females.—497 gravid females were destroyed in Port Louis and the number of young ones found in them amounted to 2,806.

Rat Inspection.—21,650 rodents were microscopically examined during the year, they were all found free from plague.

ANTI-MALARIAL WORKS.

The following anti-malarial works were performed in the District of Port Louis:—

(1) Central Channelling of the following streams: Lataniers, La Paix, Tranquebar, Pouce Stream and Terre Rouge with their feeders, on an extent of 54,695 feet.

(2) Cutting of drains and side drains to drain marshes and pools at Ste. Croix, the Western Chinese Cemetery and River Terre Rouge, Signal Mountain, Nicolay Road to an extent of 17,815 feet.

(3) Roughside walling, making of footpaths, cleaning and rough training along banks of River Terre Rouge, Pouce Stream, La Paix Stream to an extent of 88,306 feet.

(4) Filling up holes and pools in the Western Cemetery, the Ste. Croix Marshes and River Terre Rouge on an extent of 1,089 c. yards.

(5) Repairing damages done by floods: 179,774 feet of streams and drains filled up by stones or otherwise damaged by floods were cleared out and repaired several times over during the rain season.

(6) *Maintenance.*—718,745 feet of streams and drains were upkept i.e. kept constantly clean and free from mosquito larvæ.

A vigorous campaign was carried with the view of combating malaria in town. 2,109 notices, requests, schedules and statements of nuisances were issued by the staff for the abatement of all malaria nuisances. Numerous contraventions were established and, on the parties being prosecuted, the fines imposed amounted to Rs. 278.25.

RURAL DISTRICTS.—In the several sanitary sections of the rural districts, the number of contraventions detected by the Sanitary Officers was 2,882 giving rise to 2,053 prosecutions with a total of Rs. 12,330.90 fines. 6,341 notices and orders under Ordinance No. 32 of 1894-95 and 1,123 under Ordinance No. 21 of 1900 were issued for the abatement of nuisances. Of these 3,230 were not complied with, resulting in 2,489 prosecutions with a total of Rs. 5,958.40.

The revenue derived from fees collected in Cemeteries and Markets amounted to Rs. 20,736.26. The number of animals killed in the four public slaughterhouses was 2,677 and the fees collected amounted to Rs. 4,292.

The scavengering and night soil services were on the whole satisfactorily performed in all the villages of the Colony.

Noxious Factories.—One manure factory has been authorized to work at Savanne.

Anti malarial works were continued. The following is a summary of the works carried out.

Camp Fouquereaux.—Extension of canalization of Rivulets Ducray, Le Chartrie, Piston, Cresson and feeders on a length of 25,580 feet.

Mare Chicose and L'Escalier.—Canalization of Riche-en-Eau marsh, Rivulet Petit Beurre, Daniel spring, Rivulet Tranquille and digging up of new feeders on a total length of 7,569 feet.

Rivière des Anguilles.—Clearing several springs along banks of Rivière des Anguilles measuring together 3,310 feet.

Souillac.—Extension of rivulet Michel 400 feet.

Rivière Dragon.—Digging up central channel along Riv. Dragon and Riv. St Amand 530 feet.

Central Channelling and improving.—In all the districts of the colony the following streams were either centrally channellized, roughly trained or otherwise improved to an extent together of 157,341 feet viz:—

MOKA—Mare Bouillie, Feeders Gangah, Bambous, Seerathan, Canet, Valetta, Rivulet Leriche, Rivière Françoise, Rivière Profonde.

FLACQ—Rivière Céré, Feeder Ste. Anne, Feeder Profonde or Payet, Rivière Sèche.

PLAINES WILHEMS—River St. Martin, River Tatamaka, Rivulet Cresson and Le Chartrie, Mesnil, River des Plaines Wilhems, River Sèche.

GRAND PORT—River Bon Espoir, River des Créoles, Rivulet Lakam, Feeders Songe Blanc, Bon Espoir, Pointe Brocus.

SAVANNE—River des Anguilles, River Dragon, Rivulet Michel.

PAMPLEMOUSSES—Feeders Labourdonnais, Collard, Canton Nancy, Ruisseau Sec.

Drains.—Cutting of new drains, extension or improving of old drains along a length of 44,235 feet as under :

PAMPLEMOUSSES—Beau Plan drains.

FLACQ—Ste. Ursule drains.

PLAINES WILHEMS—Stanley drains, La Louise, Clairfond drains, La Croisée drains, drains on Mr. Ducasse's property. Drains on Bonnefin land.

GRAND PORT—Drain at River des Créoles Hamlet, St. Hubert drain.

SAVANNE—Rivière Dragon drains.

Repairing damage done by floods.—Nearly all upkept water courses in Moka, Plaines Wilhems, Grand Port, Savanne had to be cleared out or otherwise dealt with to repair the damage caused by the floods during the rain season. This was done on a length of roughly 150,000 feet.

Maintenance.—3,921,727 feet of rivers, rivulets, feeders and drains were upkept i.e. kept constantly clean and free from mosquito larvæ.

Distribution of quinine.—The system of house to house distribution of quinine has been continued and Distributors appointed for the following sections :

One for Port Louis.

One for Pamplemousses, Rivière du Rempart and Flacq.

One for Moka, Plaines Wilhems.

One for the Southern Districts.

The Municipality of Port Louis is also entrusted with the distribution of the drug in the central parts of the town, while in each Dispensary, Government or State Aided School, and Police Station all over the Island, depots have been instituted where the specific can be obtained free on application.

13th August, 1921.

A. LÉO CASTEL,
Chief Sanitary Officer.

